7. *Project description (describe in detail): (a) Type of system or facility, (e.g., canal, pipeline, road); (b) related structures and facilities; (c) physical specifications (Length, width, grading, etc.); (d) term of years needed: (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction (Attach additional sheets, if additional space is needed.)*

A) The Grand County Council has authorized submission of this application for the purposes of constructing a water load out facility on SR-279 (Potash Rd.), which is on the north side of the Colorado River. A new water load out facility would serve multiple user groups (Grand County Road Department, private construction companies, and the oil and gas industry) that currently extract water from an existing load out facility located at the Moab Boat Ramp or from the Moab City culinary water facility. Grand County and Moab City aim to reduce non-essential culinary water extractions for industrial uses, create a safer environment at the Moab Boat Ramp, and minimize the use of residential roads (mainly 500 West and 400 North) by water trucks. Currently, water trucks pump water from the Colorado River in close proximity to recreational users that may or may not be aware of significant safety issues associated with large water trucks.

B) The facility, approximately located at MP 13.7, consists of a graded gravel loop adjacent to the road, pump and standpipe (at the gravel loop), and 6" HDPE pipeline to the river. Grand County understands the need to comply with BLM, FWS, FFSL and other agencies to create an appropriate water screen and filtration system to prevent damage to endangered fish species. A conceptual drawing and engineering plans accompany this application.

C) Engineering and design plans are attached to this application.

D) The proposed water load out facility will be used year-round, weather permitting.

E) The proposed water load out facility will exist in perpetuity, or until it is deemed unnecessary. Reclamation will follow BLM, USACE, FWS, and FFSL protocols if and when necessary.

F) In 2014, Moab City sold over 170 Million gallons of water to commercial users. That number does include water used for Moab City and Grand County buildings and ball parks, but a substantial portion of it was used by commercial industrial users and Grand County's Road Department. It is reasonable to assume that such levels of water extraction will fluctuate as oil and gas activities in the area change according to market prices. However, there is a permanent need for water by local government agencies, private construction companies and other industrial users that should not come out of fresh water municipal supplies. Grand Water and Sewer Service Agency (GWSSA) will provide water rights in the Colorado River.

G) Construction of the proposed facility can be completed in less than one month during standard daytime business hours.

H) Equipment used to clear and grade the truck turnout loop will be temporarily parked at the proposed site for the duration of construction.

12. *Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.*

Grand County has contracted with Horrocks Engineers, its engineer of record, for the design and engineering specifications of the proposed water load out facility. Grand County is currently and informally exploring cost-sharing agreements with Moab City, Le Grand Johnson, and known industrial users of the existing water load out facility located at the Moab Boat Ramp. The Grand County Roads Department has the budget and operational capacity to complete initial construction and ongoing maintenance at the facility. In the event the facility is no longer needed, permitting agency remediation protocols will be followed.

15. *Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative; and (c) expected public benefits.*

A new water load out facility is essential to the future provision of culinary water for Moab City and Grand County residents, and to the protection of recreational users at the Moab Boat Ramp.

A) Horrocks Engineers projects a total cost of $127,228.02 for design, engineering, and construction of the proposed facility if all phases were to be contracted out to private firms. The Grand County Roads Department has the budget and operational capacity to perform construction rather than paying contractors out-of-pocket. Le Grand Johnson or Grand County can provide the base fill and gravel materials and labor at substantially lower cost than Horrocks' estimates leading to much lower total project costs. Annual operating and maintenance costs are estimated to be under $1000. Shifting commercial and industrial water extraction from Moab City's culinary supply to the Colorado River could decrease water sales by as much as $180,000 per year.
B) The next best alternative is to continue using the existing load out facility. Although this option is free in the short-term, the potential for a public safety disaster or a detrimental impact on Moab City and Grand County's water supply is too great for inaction.
C) Moab City and Grand County residents will benefit from increased safety at the Moab Boat Ramp and culinary water security.

17. *Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.*

A) The proposed water facility will create minimal impacts on air quality. The existing water load out facility at the Moab Boat Ramp currently uses a diesel generator to power its pump. A similar design would be used at the proposed facility. Emissions from water trucks using the new facility will not change substantially due to the change in location because of at least two reasons: 1) Oil and gas trucks servicing sites in the Big Flat area will travel less distance between the proposed facility and Big Flat than between the Moab City water station and Big Flat, and 2) Trucks traveling between Moab City or Grand County and the existing load must now drive past the Moab Boat Ramp and complete a U-turn in order to safely exit US Hwy 191 due to the new bridge alignment. A new facility would increase the travel distance for water trucks coming from

Moab City only 3-4 miles per round trip visit, but the improvements in public safety and water security would more than qualify the value of this project.

B) The proposed facility will create minimal visual impacts. The water load out facility at the Moab Boat Ramp will be removed, creating a nicer environment for recreational and commercial users. The proposed facility will exist downstream from the Moab Uranium Mill Tailings Remedial Action (UMTRA) site. It will not be visible from US Hwy 191.
C) The proposed facility will reduce stress on the Glen Canyon Aquifer and increase fresh water security for Moab City and Grand County.
D) No structural changes to the Colorado River will be created.
E) The proposed facility will create minimal noise impacts.
F) The proposed facility will create land surface change at the truck turnout only. Native soils and vegetation will be removed, the area graded, and filled with road base and gravel. Water runoff will increase, but the pervious gravel will limit sheet runoff to acceptable levels. A 20’ easement is included around the water pipe for the installation of a riverside pump and periodic maintenance. It will not see regular use.